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EVRARDIA ASRAOA JOSEPH ET ABBAREDDY — A NEW ORCHID SPECIES FROM KHASI HILLS, MEGHALAYA, WITH INCIDENTAL FIRST RECORD OF THE GENUS FOR INDIA

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Evrardia asraoa Joseph et Abbareddy, sp. nov. *E. poilanei* Gagnep., proxime affinis, sed praecipue distincta epichilium alarum lobulis terminalibus elongatis absentibus, laciniis mesochilii profunde irregulariter erosis, non irregulariter dentatis, et rostello simplici, non furcati.

Holotypus Joseph 73566A (CAL) ; *Isotypi Joseph* 73566B-D (ASSAM), *Joseph* 73566E (MH), 26.8.1980, lecti ad locum Pynursla (alt. *ca.* 1500 m), Khasi Hills, Meghalaya, India.

Evrardia asraoa Joseph et Abbareddy, sp. nov. is closely allied to *E. poilanei* Gagnep., but distinctive mainly in the absence of elongate terminal lobules for the epichile wings, in the presence of deeply irregular erose mesochile flangs instead of irregularly dented, in the presence of simple rostellar process instead of forked.

Holotype Joseph 73566A (CAL) ; *Isotypes Joseph* 73566B-D (ASSAM), *Joseph* 73566E (MH), 26.8.1980, collected from Pynursla (alt. *ca.* 1500 m), Khasi Hills, Meghalaya, India.

The specific epithet is in honour of Dr. A. S. Rao, who has made intensive collection and critical study of orchids of Khasi Hills.

The genus *Evrardia* Gagnep., was described on the basis of two collections of *Evrard* and *Poilane* from Vietnam with *E. poilanei* as the type species. It was subsequently discovered in Thailand also. A Saprophyte collected in Pynursla has proved to belong to this genus but a distinct species, which is now described.

Evrardia Gagnep., is closely allied to *Anoectochilus* Bl. in habit, habitat and in the general morphology of flowers, but is distinctive in being aphyllous, flowers being non-resupinate and in the nonformation of hood by the adherence of odd sepal with the lateral petals.

Leafless, fleshy decumbent deep brick-red dwarf saprophytes. *Creeping rhizome* slender, fleshy, horizontal, white, producing fleshy dwarf spreading branches ; *dwarf branches* white, coralloid, with scales at nodes concealing tiny accessary buds and with scattered shortly-hairy warts. *Inflorescence* an erect spike of 5-7 flowers. *Scape* 6-10 cm, with many sheathing scales, brick-red ; *scales* about 7, tubular at base and oblique at mouth, distant. *Flowers* few, lax, brick-red, fleshy, sessile, non-resupinate. *Floral bracts ca.* 15 x 7 mm, as long as or longer than the ovary, ovate-lanceolate, obtuse to acute, erect, concave, enveloping the ovary, with a distinct median nerve and two faint laterals, sparsely papillose externally. *Odd sepal ca.* 7.5 x 4.0 mm, ovate, obtuse, incurved at tip, concave, 1-nerved, papillose externally more so towards the base. *Lateral sepals ca.* 11.5 x 4.0 mm, longer than the odd sepal, oblong-lanceolate, obtuse, with a distinct midnerve and two faint laterals, papillose externally more so towards the base. *Lateral petals ca.* 10 mm long and *ca.* 3 mm broad towards the base and much narrower above, obtuse, 1-nerved. *Lip ca.* 14 x 13 mm, superior, T-shaped, saccate at base and notched at apex ; epichile 2-winged ; wings irregularly crumpled at margins, finely papillose, orange-yellow ; outer margins running down to the base of the mesochile as two erect lamellae leaving a channel in between ; mesochile unequally and obscurely many fringed, papillose ; sac *ca.* 3 mm in diameter, subglobose, bi-gibbous, with two glands one on each side of the sac and a distinct vertical median ridge. *Column ca.* 5.0 x 2.5 mm, short, with a narrow neck and a swollen head ; anther dorsal, elongate, 2-celled ; anther cap broadly lanceolate, with long narrow beak, auricular at base and hinged to the column with a short stalk, persistent ; stalk broad at base and narrow above ; pollinia narrowly clavate in two groups, sectile, united at the pseudocaudicular region ending in a membranous discoid viscidium ; rostellar process simple, shorter than the anther beak, grooved abaxially, porrect ; stigmatic surface conspicuous, large, semi-circular, almost exceeding the sides of the column and filling up the space between the rostellar process above and stigmatic processes below ; stigmatic processes 2, flat, oblong, slightly diverging, a little thick, vertical with revolute margins. *Ovary ca.* 14 x 4 mm, oblong, with a short neck, finely puberulous, swollen.

Rare, in shady forest floor near boulders. *Flowering* : August-September.

The allied species *Evrardia poilanei* Gagnep., is hitherto known only from Vietnam, the type locality, and Thailand. Our species is quite scarce, and its discovery forms an addition to the orchid flora of India and also extends the distribution range of the genus. With further exploration and dilligent search in likely habitats, this species may be found in other areas of Meghalaya and elsewhere.

Evrardia asraoa Joseph et Abbareddy also resembles *Hetaeria inverta* (W. W. Sm.) Schltr. (*Zeuxine inverta* W. W. Sm.) in the habit but differs in the following characters.

	E. asraoa	*H. inverta*
Flowers	Non-resupinate	Resupinate
Stigma	Single, large, transverse	Two, small, lateral
Ovary	Papillose hairy	Glabrous

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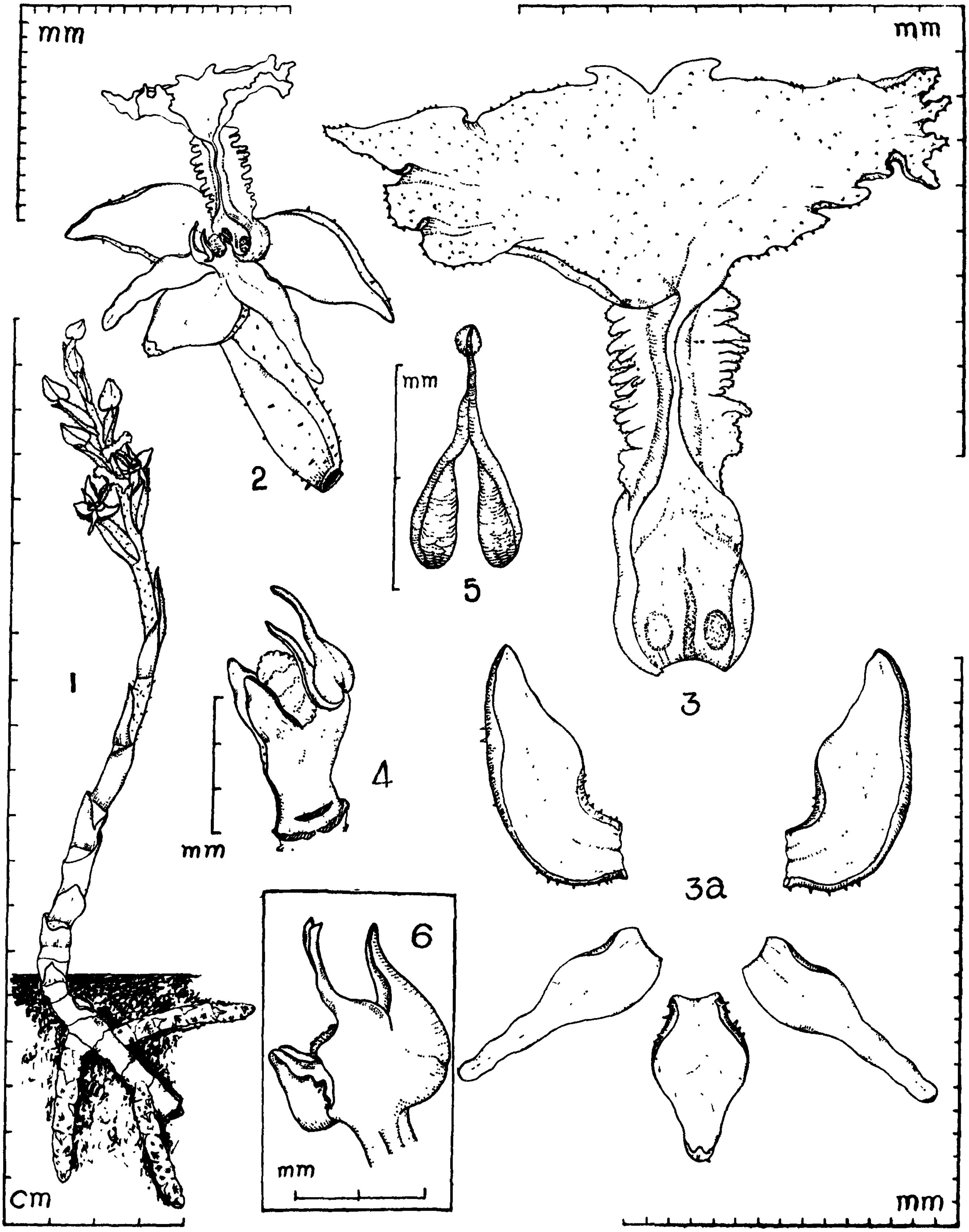
REFERENCES

GAGNEPAIN, F. Orchidaceae in Lecomte (ed.) Flore Generale del' Indo-Chine 6: 142-647. Paris, 1934.

SEIDENFADEN, G. Orchid Genera in Thailand VI, 2: 59. Köbenhavn, 1978.



Evrardia asraoa Joseph et Abbareddy sp. nov.
Figs. 1-6: 1. Habit. 2. Flower. 3. Lip enlarged. 3a. Sepals and petals. 4. Column. 5. Pollinia. 6. *E. poilanei* Gagnep. -- Column (after Seidenfaden).